

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

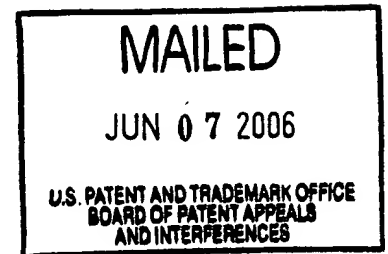
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YOSUKE KONAKA

Appeal No. 2006-1215
Application No. 09/781,324

HEARD: MAY 11, 2006



Before MARTIN, JERRY SMITH, and BARRY, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-42, which constitute all the claims pending in this application.

The disclosed invention pertains to an electronic apparatus to which a plurality of batteries are detachably mounted.

Representative claim 1 is reproduced as follows:

1. An electronic apparatus to which a plurality of batteries are detachably mounted, comprising:

a removal requirement receipt section receiving a removal requirement for a part of the mounted batteries;

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a processing ability determination section responsive to the removal requirement for a battery from said removal requirement receipt section to determine whether a supplying possible electric power from the remaining batteries is an electric power capable of maintaining a processing ability or an electric power which needs to lower the processing ability; and

a processing ability control section lowering the processing ability while keeping the electronic apparatus operative in accordance with a decision from said processing ability determination section that the electric power needs to lower the processing ability.

The examiner relies on the following references:

Dunstan	5,600,230	Feb. 04, 1997
Takizawa et al. (Takizawa)	5,739,596	Apr. 14, 1998
Pole, II et al. (Pole)	6,272,642	Aug. 07, 2001
		(filed Dec. 03, 1998)

Claims 1-42 stand rejected under 35 U.S.C. § 103(a). As evidence of obviousness the examiner offers Takizawa in view of Pole with respect to claims 1-15 and 25-34, and Dunstan is added to this combination with respect to claims 16-24 and 34-42.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the

rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in the claims on appeal. Accordingly, we affirm.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). The examiner must articulate reasons for the examiner's decision. In re Lee, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). In particular, the examiner must show that there is a teaching, motivation, or suggestion of a motivation to combine references relied on as evidence of obviousness. Id. at

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1343, 61 USPQ2d at 1433-34. The examiner cannot simply reach conclusions based on the examiner's own understanding or experience - or on his or her assessment of what would be basic knowledge or common sense. Rather, the examiner must point to some concrete evidence in the record in support of these findings. In re Zurko, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Thus the examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the examiner's conclusion. However, a suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. In re Kahn, 441 F.3d 977, 987, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (citing In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313 (Fed. Cir. 2000)). See also In re Thrift, 298 F. 3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002). These showings by the

examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered and are deemed to be waived [see 37 CFR § 41.37(c)(1)(vii)(2004)].

We consider first the rejection of claims 1-15 and 25-34 based on Takizawa and Pole. With respect to independent claims 1-3, the examiner essentially finds that Takizawa teaches the claimed invention except that Takizawa does not teach the lowering of the processing ability while keeping the electronic apparatus operative as recited in the claims. The examiner cites

Pole as teaching a system and method for managing power in an electronic apparatus such that the power applied to the device can be lowered while keeping the device operative. The examiner holds that it would have been obvious to the artisan to modify Takizawa to include a lower processing ability as taught by Pole in response to a determination that the charge level is insufficient to fully power the device [answer, pages 3-5].

With respect to claim 1, which is argued as the representative claim for claims 1, 4, 7, 9, 11, 13, 16, 18, 20, 22, 23, 25, 28, 30, 32, 34, 36, 38, 40 and 41, appellant argues, without substantial explanation, that neither Takizawa nor Pole has any teaching or suggestion relating to the claimed processing ability determination section. Appellant also argues that the examiner's line of reasoning for combining the teachings of Takizawa and Pole is deficient and is simply a hindsight reconstruction of the claimed invention [brief, pages 9-12].

The examiner responds that Takizawa teaches a processing ability determination section that determines whether there is sufficient power to operate the device if one of the batteries is removed. The difference between Takizawa and the claimed invention is that Takizawa turns off power to the device if there

is insufficient power to operate the device. The examiner notes that Pole also teaches a processing ability determination section that lowers the processing ability of the device while maintaining the device in an operable condition. The examiner also responds that the combination of the reference teachings is not based on hindsight because Pole suggests to the artisan that the life of the batteries can be lengthened by switching to a lower performance state during low usage [answer, pages 13-15].

Appellant responds that although Takizawa determines whether one of a plurality of battery packs provides a sufficient voltage, there is no determination of whether to maintain a processing ability or lower the processing ability based on the available electric power provided by the batteries. Appellant also responds that although Pole teaches that depending on the desired power consumption, the system may be set to one of multiple performance states, it does not teach the claimed processing ability determination section. Finally, appellant argues that the cited portion of Pole would not have led the artisan to combine the teachings of Takizawa and Pole to achieve the claimed invention [reply brief, pages 1-4].

We will sustain the examiner's rejection of claims 1, 4, 7, 9, 11, 13, 16, 18, 20, 22, 23, 25, 28, 30, 32, 34, 36, 38, 40 and 41 for essentially the reasons argued by the examiner in the answer. Takizawa clearly teaches a processing ability determination section responsive to the removal requirement for a battery. In Figure 6 for example, Takizawa teaches that when a first battery is to be removed, a determination is made as to whether the voltage of the other battery is sufficient to continue to operate the device (S56). If the voltage of the other battery is sufficient, then power to the device is switched to the other battery (S60). If the voltage of the other battery is not sufficient to power the device, however, the device is turned off (S62). Thus, in our view, Takizawa teaches the invention of claim 1 except that Takizawa turns the device off rather than keeping the device operative under a lower processing ability. Pole teaches that an electronic device may have multiple performance states based on the desired power consumption of the device [column 2, lines 4-6]. Pole also teaches that one of the events that may trigger a transition from a first power mode to a second lower power mode is a change in the power source used by the device. Thus, Pole teaches changing

the processing ability of an electronic device to a lower, but still operative, state upon detection of a power source change. We agree with the examiner that the artisan would have been motivated to modify Takizawa to permit lower processing states as taught by Pole instead of requiring a complete shutdown whenever the lower processing states can be handled by the other battery.

With respect to claim 2, which is argued as the representative claim for claims 2, 5, 8, 10, 12, 14, 17, 19, 21, 24, 26, 29, 31, 33, 35, 37, 39 and 42, appellant makes the same arguments we considered above with respect to claim 1. Therefore, we sustain the rejection of these claims for the same reasons discussed above with respect to claim 1.

With respect to claim 3, which is argued as the representative claim for claims 3, 6, 15 and 27, appellant makes the same arguments we considered above with respect to claim 1 and additionally argues that neither Takizawa nor Pole teaches or suggests the feature of lowering the processing ability of the device in response to the detection of removal of a battery [brief, page 13]. The examiner responds that the claims do not require lowering the processing ability in response to detection

of removal of a battery, but only a lowering of the processing ability while keeping the device operative [answer, page 16]. Appellant responds that the examiner's interpretation of what is required by the claimed invention is incorrect [reply brief, page 5].

We will sustain the examiner's rejection of claims 3, 6, 15 and 27. Claim 3 differs from claims 1 and 2 in that claim 3 recites "detecting mounting and removal of batteries" and "detection of a removal of a battery" while claims 1 and 2 only recite a detection of a removal requirement for a battery. Appellant argues that neither Takizawa nor Pole teaches detection of the removal of a battery. We do not agree. Although Takizawa teaches that the opening of a battery cover is used to signal an intended battery change, Takizawa also teaches that this detection is the same as detecting the loading and unloading of the battery. Specifically, Takizawa states:

The cover detection switch 14 forms the battery load/unload detector means for detecting whether a battery pack is being installed or removed, and preferably operates by detecting whether the battery cover is opened or closed [column 5, lines 51-55].

Thus, even though Takizawa detects the opening of the battery cover, Takizawa also suggests that it is the loading and

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unloading of the battery which is important. Therefore, we find that Takizawa teaches the claimed detecting of the mounting and removal of batteries.

In summary, we have sustained each of the examiner's rejections of the claims on appeal. Therefore, the decision of the examiner rejecting claims 1-42 is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

John C. Martin
JOHN C. MARTIN

JOHN C. MARTIN
Administrative Patent Judge

Gerry Smith
JERRY SMITH

JERRY SMITH
Administrative Patent Judge

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~~Administrative Patent Judge~~

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